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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,325	07/24/2001	Yuta Ohki	010919	1391

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WASHINGTON, DC 20006

EXAMINER

FORD, JOHN K

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 05/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/ 869, 325

Applicant(s)

Ohki

Examiner

FORD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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Applicant has submitted as prior art three references JP 06-335633, JP 08-117590 and JP 10-275582 without any meaningful translation. Please provide complete translations of each of these references or, at minimum, complete translations of those sections deemed, by the Japanese patent Examiner, to render the claimed subject matter obvious (see the PCT form 210 appended to this office action, on the following page).

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

first species of Figures 1-3,

second species of Figure 4,

third species of Figure 5,

fourth species of Figure 6,

fifth species of Figures 7-9,

sixth species of Figure 10,

seventh species of Figures 11-12 and

an in-determinant number of additional species (unillustrated) described in the specification in which certain features of at least one of the aforementioned seven species is combined with features of another of the aforementioned seven species (as disclosed in the

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/08265

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> G05D23/19

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> G05D23/00-23/32

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Koho 1926-1996 Jitsuyo Shinan Toroku Koho 1996-1999  
Kokai Jitsuyo Shinan Koho 1971-1998 Toroku Jitsuyo Shinan Koho 1994-1999

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP, 06-335633, A (Aisin Seiki Co., Ltd. & Tekunoro Kogyo K.K.), 06 December, 1994 (06.12.94), page 2, left column, lines 45 to 46; page 2, right column, lines 31-49; page 3, left column, lines 37-48; Fig. 1 (Family: none)	1, 2, 4, 5
Y	US, 5475610, A (The Parkin-Elmer Corporation), 12 December, 1995 (12.12.95) & US, 5282543, A & US, 5602756, A & US, 5710381, A & US, 6015534, A & JP, 06-233670, A	1, 2, 4, 5
Y	JP, 08-117590, A (Sanyo Electric Co., Ltd.), 14 May, 1996 (14.05.96), page 2, right column, line 37 to page 3, left column, line 18 (Family: none)	1, 2, 4, 5
Y	JP, 10-275582, A (JEOL LTD.), 13 October, 1998 (13.10.98), page 2, left column, lines 30 to 36; Fig. 2 (Family: none)	1, 2, 4, 5

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:  
"A" document defining the general state of the art which is not  
considered to be of particular relevance  
"E" earlier document but published on or after the international filing  
date  
"L" document which may throw doubts on priority claim(s) or which is  
cited to establish the publication date of another citation or other  
special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other  
means  
"P" document published prior to the international filing date but later  
than the priority date claimed

"T" later document published after the international filing date or  
priority date and not in conflict with the application but cited to  
understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot be  
considered novel or cannot be considered to involve an inventive  
step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot be  
considered to involve an inventive step when the document is  
combined with one or more other such documents, such  
combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search  
09 January, 2000 (09.01.00)

Date of mailing of the international search report  
16 January, 2001 (16.01.01)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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specification on page 13, lines 2-4, page 16, lines 7-9, page 16, lines 19-25 and page 16, line 27-  
page 17, line 3).

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election. If one of these in determinant number of additional species is elected a proposed drawing correction showing it in totality is required in response to this action.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: None.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Claims 1-3 all recite a connector plate (15) a feature shown in the first six species of Figures 1-10. Claims 4-6 all recite a low conductivity cooling block in place of a connector plate as disclosed in the seventh species shown in Figures 11-12.

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The remaining features recited in at least claims 1, 2, 4 and 5 are all well known and in the public domain as evidenced by USP 5,819,842.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Potter et al. (USP 5,819,842).

In Potter, a high thermal capacity metal cold block 25 is cooled by thermoelectric cooler 26. A connecting plate 24 (made of "an insulator composed of plastic loaded glass fibre, ceramic alumina or aluminum nitride, glass or plastic...") "combines" (to use applicant's claim language)

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the heating block 22 and the cold block 25. At least some, if not all, of the enumerated materials for the connector plate 24 have a thermal conductivity lower than that of the cold block 25 and the heating block 22. The upper surface of the heating block 22 serves as a sample container holder (either directly or with the assistance of the, optional, spreader plate 21).

Regarding claims 3 and 6, Potter teaches a heated lid which covers the top of each sample container (col. 7, lines 6-12).

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1, 2, 4 and 5 above, and further in view of Duges (USP 3,949,806) and any one of Dutertre et al. (USP 5,161,609) or Seiko (JP 3-297377) or Picozza et al. (USP 5,282,543).

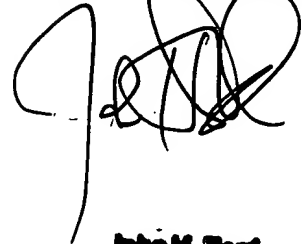
To have added a temperature conditioned block covering the upper portion of the sample containers in Potter to either encourage or discourage refluxing (depending on the process desired to be performed in the device) would have been obvious in view of Dutertre (Figure 4), Seiko (Figure 1 reference numerals 4 and 5) or Picozza et al. (Figure 2, elements 28 and 10). Duges, relied upon for motivation for making any of the aforementioned obvious modifications provides a specific teaching of heating the bottom of a reaction vessel and cooling the top to encourage refluxation when the chemical reactants are in need of such processing.

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Any inquiry concerning this communication should be directed to John Ford at telephone number 703-308-2636.

A handwritten signature in black ink, appearing to be 'John K. Ford', written in a cursive style.

**John K. Ford**  
**Primary Examiner**